



**State of Texas Assessments of Academic Readiness (STAAR®)**  
**Performance Level Descriptors**  
**Grade 8 Mathematics**

**Performance Level Descriptors**

The mathematical process skills describe ways in which students are expected to engage in the content. They are not assessed in isolation but are incorporated into questions that assess grade 8 content. The process skills focus on applying mathematics to solve problems, analyze mathematical relationships, and communicate mathematical ideas.

**Students achieving Level III: Advanced Academic Performance can**

- Describe relationships between sets of real numbers
- Use multiple representations of proportional and non-proportional linear relationships
- Model one-variable inequalities with variables on both sides of the inequality sign
- Use algebraic representations to describe the effects of rotations, reflections, translations, and dilations

**Students achieving Level II: Satisfactory Academic Performance can**

- Represent and use real numbers in a variety of forms
- Determine the rate of change or slope from a table or graph
- Use proportional and non-proportional relationships to develop foundational concepts of functions
- Model and solve one-variable equations with variables on both sides of the equal sign
- Use proportional relationships to describe dilations
- Solve application problems involving surface area, volume, and the Pythagorean theorem
- Solve problems involving rotations, reflections, translations, and dilations
- Use data sets to describe relationships and make predictions
- Solve problems involving interest and savings

**Students achieving Level I: Unsatisfactory Academic Performance can**

- Approximate the value of irrational numbers
- Identify proportional relationships
- Use models and diagrams to explain the Pythagorean theorem
- Identify transformations that preserve congruence